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REACTIVE HEAT TREATMENT TO FORM
PEARLITE FROM AN IRON CONTAINING ARTICLE

ABSTRACT OF THE DISCLOSURE

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The present invention is directed to a process for producing pearlite from an iron containing article comprising the steps of, (a) heating an iron containing article comprising at least 50 wt % iron for a time and at a temperature sufficient to convert at least a portion of said iron from a ferritic structure to an austenitic structure, (b) exposing said austenitic structure, for a
10 time sufficient and at a temperature of about 727 to about 900°C, to a carbon supersaturated environment to diffuse carbon into said austenitic structure and (c) cooling said iron containing article to form a continuous pearlite structure.

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